US ERA ARCHIVE DOCUMENT

CASWELL FILE

DATE:

September 22, 1978

SUBJECT:

1.0

Substitution of the synthetic pyrethroid 3-phenoxybenzyl d-cis and trans 2, 2-dimethyl -3- (2-methylpropenyl) cyclopropanecarboxylate, 0.23% (synonyms: 3-phenoxybenzyl d-cis, trans chrysanthemate, d-phenothrin, sumithrin) for synergized pyrethrins in sanitizer Reg. No. 00397-00007 (Steri-Fab).

Caswell No. 25, 844, 652B

FROM:

D.G. Van Ormer

TOX. Branch/HED (TS-769)

TO:

Mr. John Lee

Product Manager No. 31

<u>Intended Use</u>: Sanitizer and insecticide for mattresses, sofas, and other furniture.

Recommendation: Due to the low over-all toxicity of the requested substituent, the above substitution should result in no significant alteration of formulation toxicity. The formulation is expected to fall in TOX. Category III or IV, and can be classified for general use.

Review:

1. Active Ingredient (d-phenothrin) (D. Reisa, Caswell No. 844)

Oral LD-50, rat > 10,000 mg/kg
Dermal LD-50, rat > 5,000 mg/kg
Inhalation LC-50 (rat, mouse, 4-hour)
> 1180 mg/m³

Irritation --zero 90-day feeding, rat

NEL = 1000 ppmNEL = 200 ppm

Teratology, mouse NEL = 200 ppm

2. Formulation Containing Phenothrin and Two other Synthetic Pyrethroids (R. Engler, Caswell No. 844)

Studies of this complex formulation containing total pyrethroids at about 20-times the above applicant's label concentration showed a rating of TOX. Category IV.

3. Some proparations containing synthetic pyrethroids are less likely (than pyrethrum extract) to result in allergic reactions. (Casarett and Doull, p. 437)

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S.E. W 9/22/28